

AMENDMENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for prioritizing frames, via a transmit prioritizer, for transmission from a local node according to frame type, comprising:

determining if a remote node is open;

if the remote node is open, then determining if there are contexts for the remote node in which the contexts are arranged in a plurality of queues, one queue included in the plurality of queues being both a response queue and a transfer ready queue;

if no contexts reside on the queues for the remote node, then examining an on-chip context cache to determine a context for the remote node when the remote node is a current remote node of a current loop, thereby promoting saving of a current loop tenancy;

if there are contexts in the on-chip context cache for the remote node, then retrieving and queuing cached context for the remote node;

determining if there is context on a data queue for the remote node;

if there is context on the data queue for the remote node, then prioritizing context on the data queue for the lowest direct memory access latency for the remote node; and

prioritizing an earliest queued context for the remote node with the highest weight via equation: $\text{priority value} = A * \text{priority type} + B * \text{time of entry}$, wherein A and B are at least one of: fixed constants; and variables, said fixed constants and variables being configured for being established via at least one of: software, an external device, and a user to provide a weighing factor,

wherein the remote node is a device on a Fibre Channel Arbitration Loop.

2. (Cancelled)

3. (Previously Presented)
4. (Previously Presented) The method of Claim 3, further comprising,.
5. (Original) The method of Claim 4, further comprising,.
6. (Original) The method of Claim 5, further comprising
7. (Currently Amended) The method of Claim [[4]] 1, further comprising, if there is no context on the data queue for the remote node, then prioritizing an earliest queued context for the remote node with the highest weight.
8. (Cancelled)
9. (Currently Amended) The method of Claim [[6]] 1, wherein the method is performed by another device on the Fibre Channel Arbitration Loop.
10. (Original) The method of Claim 9, wherein the contexts are arranged in a third queue.
11. (Original) The method of Claim 10, wherein each of the first, second, and third queues stores a unique type of frame.
12. (Original) The method of Claim 11, wherein the contexts are arranged in fourth and fifth queues.
13. (Original) The method of Claim 12, wherein the first, second, third, fourth, and fifth queues are extended link service, manual, response, transfer ready, and data, respectively.

14. (Original) The method of Claim 13, wherein the first queue has a higher priority than the second queue and the second queue has a higher priority than the third queue.

15-25. (Cancelled)

26. (Currently Amended) A system of communicatively coupled devices, comprising:
a plurality of nodes, each of the plurality of nodes communicatively coupled to all other nodes of the plurality of nodes in a loop topology, each of the plurality of nodes capable of receiving information from every other node of the plurality of nodes and capable of transmitting information to every other node of the plurality of nodes per loop, such that no two nodes transmit to a same node in a loop, wherein communications between nodes uses multiple queues to determine priority for transmitting frames of information, wherein a node included in the plurality of nodes includes on-chip cache configured for storing contexts and further configured for being examined for contexts when no contexts reside on the multiple queues for a current remote node and current loop, thereby promoting saving of a current loop tenancy, wherein a queue included in the multiple queues is both a response queue and a transfer ready queue, the system being configured for prioritizing an earliest queued context for the remote node with the highest weight via equation: $\text{priority_value} = A * \text{priority_type} + B * \text{time_of_entry}$, wherein A and B are at least one of: fixed constants; and variables, said fixed constants and variables being configured for being established via at least one of: software, an external device, and a user to provide a weighing factor.

27. (Original) The system of communicatively coupled devices of Claim 26, wherein the loop topology is a Fibre Channel Arbitration Loop.

28. (Original) The system of Claim 26, wherein the multiple queues include a response queue.

29. (Original) The system of Claim 28, wherein the multiple queues include an extended link service queue.

30. (Original) The system of Claim 29, wherein the multiple queues include a transfer ready queue.

31. (Original) The system of Claim 30, wherein the multiple queues include a manual queue.

32. (Original) The system of Claim 31, wherein the multiple queues include a data queue.

33. (Original) The system of Claim 32, wherein the multiple queues include a command queue.

34. (Original) The system of Claim 26, wherein the plurality of nodes are two to 126 in number.

35. (Original) The system of Claim 26, wherein the plurality of nodes are in a dual loop arrangement such that each node receives and transmits information to each of two nodes through two loops in which information flows in opposite directions.

36. (Original) The system of Claim 26, wherein a node corresponds to one device.

37. (Original) The system of Claim 26, wherein a node corresponds to a plurality of devices.